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Project	Post-implementation review of IFRS 8		
Paper topic	Appendices: Summary of relevant literature to December 2012		
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This paper has been prepared by the staff of the IFRS Foundation for discussion at a public meeting of the IASB and does not represent the views of the IASB or any individual member of the IASB. Comments on the application of IFRSs do not purport to set out acceptable or unacceptable application of IFRSs. Technical decisions are made in public and reported in IASB *Update*.

Purpose

1. This paper contains appendices that provide details of the findings of academic research and other reports about the impact of the application of IFRS 8 *Operating Segments*. This paper accompanies January 2013 Staff Paper 6B ‘Review of academic literature to December 2012’. This paper does not contain questions for the IASB.

Structure of the paper

2. The paper is organised as follows:
 - (a) Introduction
 - (b) Overview of research methods
 - (c) Appendix A: Academic research on IFRS 8—List of studies.
 - (d) Appendix B: Academic research on IFRS 8—Summary of findings.
 - (e) Appendix C: Other research on IFRS 8—Published reports.

Introduction

3. This paper accompanies January 2013 Staff Paper 6B ‘Review of academic literature to December 2012’. It includes three appendices that provide details of the academic research and other reports that are referred to in Staff Paper 6B.
- (a) Appendix A: Academic research on IFRS 8—List of studies. The list contains published or accepted papers and working papers. It shows the authors, study setting and research questions for each study and includes a bibliography.
 - (b) Appendix B: Academic research on IFRS 8—Summary of findings. This appendix provides details of the findings of each of the academic studies. The studies that are published or accepted for publication (ie forthcoming) include data and conclusions that not will change. In contrast, the working papers may be revised and developed further. Their data and conclusions may change.
 - (c) Appendix C: Further research on IFRS 8—Other reports. This appendix includes a list of reports provided by regulators and other entities (Table 1). It also contains a summary of the reports’ findings (Table 2). The content of these reports will not change.

Overview of research methods

The working papers included in the literature review have been prepared in a relatively short time. Consequently, they often include small samples (because of lack of data availability) and may have not yet received formal or informal peer reviews. Their findings and conclusions may change as the studies go through the peer review process. In this summary, we do not present a critical review of the studies and generally avoid highlighting limitations in the design of the study or in its execution. Our objective is to include as many studies as possible that contain data which may be useful for answering the questions of interest to the IASB in relation to the application of IFRS 8.

In addition, the findings must be reviewed within the constraints of the research process. Relevant issues are as follows:

- What is the sample size and the location of companies? Can we generalise the results based on this sample to other companies and settings?
- What is the source of data? Has it been hand collected rather than from a database? For segment data, hand-collected data is likely to be more detailed and accurate.
- Are the statistical tests used and interpreted correctly?
- Are the models constructed appropriately? That is, is the selection and use of variables justified in terms of previous research and the setting of the present research paper?
- Have the authors carried out robustness tests? That is, what happens if they change elements of the sample or model? Do the results remain the same?

The studies use a range of research methods. The evidence that they present is based on use of the following techniques:

- *Descriptive statistics*: data is collected about segment information under IFRS 8 and IAS 14 (eg number of segments, segment profit, segment assets) and compared. A statistical test informs us whether the items are significantly different when companies follow one Standard or the other.
- *Tests of association*: data is collected about a set of variables. The extent to which one variable (the dependent variable) is associated with the other variables (the variables predicted to influence the dependent variable) is explored using regression analysis.
 - *Tests of value relevance*: multivariate regression models are used to test the statistical association of items of information (eg a company's book value of equity, book value of earnings, segment earnings, segment assets) with the company's share price or market returns. A significant positive association is interpreted to mean that capital market participants (the users of accounting information and the people whose actions influence share prices) find the information useful.
 - *Tests of properties of analyst forecasts*: the dependent variable is an attribute of analyst forecasts (eg error or dispersion). The independent variables are those expected to influence the attribute (eg they are expected to lead to lower error or dispersion). (Note: these tests can only show association. They cannot show causality.)

Appendix A: Academic research on IFRS 8—List of studies

Author	Study setting	Research questions
<i>Published or forthcoming</i>		
Crawford <i>et al.</i> (2012)	IFRS 8 v. IAS 14 UK 150 listed UK companies (99 FTSE 100 and 51 FTSE 250). (1) A comparison of data presented in segment reports under IAS 14 and IFRS 8 for FYE 31 December 2008 and 2009 (one year pre- and one year post-application of IFRS 8). (2) Comments from 20 interviewees (6 preparers, 7 auditors, 7 users).	RQ1: Did segment disclosure change under IFRS 8? RQ2: Is IFRS 8 more decision useful than IAS 14?
Mardini <i>et al.</i> (2012)	IFRS 8 v. IAS 14 Jordanian listed companies 109 companies listed on Amman Stock Exchange in the first and second markets, from the financial (43 per cent), services (23 per cent) and industrial (34 per cent) sectors. A comparison of data presented in segment reports under IAS 14 and IFRS 8 for FYE 31 December 2008 and 2009 (one year pre- and one year post-application of IFRS 8).	RQ1: What is the impact of IFRS 8 on disclosure? RQ2: To what extent does IFRS 8 segment disclosure differ from disclosure under IAS14?
Nichols <i>et al.</i> (2012)	IFRS 8 v. IAS 14 EU listed companies 335 listed European companies from 12 EU countries and Norway and Switzerland. Eleven industry sectors including manufacturing 40 per cent; finance, insurance and real estate 23 per cent; Mining 6 per cent; Communications 6 per cent; and sundry others 25 per cent. A comparison of IAS 14 and IFRS 8; one year pre- and one year post-application of IFRS 8 (31 December 2008 and 2009). The sample includes 32 early applying companies.	RQ1 Did companies early apply? RQ2 Are operating segments consistent with other parts of the report? RQ3 What segments are disclosed? RQ4 Are more segments reported? Are there fewer single segment companies? RQ5 What items are disclosed? What measures of profitability are used? RQ6 Are segment items reconciled to financial statement amounts? RQ7 What items are included in entity-wide disclosures? RQ8 Is the CODM identified? Data to answer each of these questions is collected from the financial statements and analysed.
Kang and Gray (2012)	AASB 8 v. AASB 14 (IFRS 8 v. IAS 14) Australia 189 listed companies in 2008 and 2010. Industries include energy/materials/industrials (24 per cent), consumer discretionary/staples (17 per cent); financials	RQ1 Does format and identification of reportable segments change under IFRS 8? RQ2 Does the number of reportable segments increase under IFRS 8? RQ3 Does the extent of segment information disclosed increase under IFRS 8?

Author	Study setting	Research questions
	(19 per cent), others (15 per cent).	
Pisano and Landriana (2012)	IFRS 8 v. IAS 14 Italy Listed companies (124) in FYE 2008-2009. Non-financial companies from a range of industries (manufacturing 33 per cent; media and telecommunication 14 per cent; utility 11 per cent clothing 9 per cent).	RQ1 Is segment disclosure associated with level of industry competition? RQ2 Is variation in segment disclosure associated with level of industry competition?

<i>Working papers</i>		
Aleksanyan and Danbolt (2012)	SSAP 12, IAS14R and IFRS 8 in the UK 127 UK listed companies (889 company-years) from 2002-2004; 2006-2008; 2010.	RQ1. To what extent did SSAP 25, IAS 14 and IFRS 8 affect the number and types of segments reported? RQ2. Did the adoption of each standard reducing the aggregation level of the geographical areas? RQ3. To what extent did each standard affect the types and volume of segment information disclosed (a) for different types of segments, and (b) per reporting company? Did the standards increase the volume of segmental profitability information?
Bugeja, Czernkowski and Moran (2012)	AASB 14 v. AASB 8 (IFRS 8 v. IAS 14) Australia 1,617 listed companies, one year pre- and one year post-application of AASB 8 (in the period 2009-2010).	RQ1 Do companies disclose more segments under IFRS 8? RQ2 Is the increase in number of segments positively associated with company diversity? RQ3 Is the increase in number of segments positively associated with segments making an operating loss? RQ4 Is segment disclosure positively related to industry concentration? RQ5 When there is no change in number of segments, does segment disclosure decrease under IFRS 8?
Demerens, Delvaile, Le Manh, Paré and Alexander (2012)	IFRS 8 v. IAS 14 EU listed companies 197 listed companies from Germany, France, UK and Italy.	RQ1 What are the segment reporting practices of intermediate-sized companies? RQ2 To what extent do companies comply with IFRS 8? RQ3 What segment information is voluntarily reported? RQ4 How many companies are early adopters? RQ5 Are there country differences in segment reporting? RQ6 Are differences in segment reporting linked to type of business activity?

He, He and Evans (2012)	AASB 8 v. AASB 14 (IFRS 8 v. IAS 14) Australia 173 listed companies, one year pre- and one year post-application of AASB 8 (in the period 2008-2010). Nine industry sectors including industrials (28 per cent); materials (20 per cent); consumer discretionary (18 per cent); and energy (10 per cent).	RQ1 Do companies report (a) more segments (b) less segment information and (c) less geographical information after application of AASB 8? RQ2 Does analyst forecast accuracy increase and forecast dispersion decrease after application of AASB 8?
Heem and Valenza (2012)	IFRS 8 v. IAS 14 France 37 of CAC 40-listed companies in first half-yearly reporting under IFRS (in the period 2007-2009; includes two early applicers)	RQ1 Do companies disclose more segments under IFRS 8? RQ2 What items of information are included?
Kajuter and Nienhaus (2012)	IFRS 8 v. IAS 14 Germany HDAX-listed companies, 110 per year for four years 2007-2010. Excludes banks, insurance and financial sector companies. Companies must have three sectors.	RQ1 What is the value relevance of segment information compared to other financial statement information? RQ2 How useful are items in segment reports? RQ Is IFRS 8 information more value relevant than IAS 14 information? The study uses data collected from financial statements and databases.
Leung and Verriest (2012)	IFRS 8 v. IAS 14 EU listed companies 844 listed European non-financial companies from 16 EU countries and Norway and Switzerland. Companies had more than 50 per cent foreign sales in 2009. A comparison of IAS 14 and IFRS 8; one year pre- and one year post-application of IFRS 8 (31 December 2008 and 2009). The sample includes 32 early applying companies.	RQ1 How does IFRS 8 impact on segments disclosure? RQ2 How does the impact vary with poor quality reporting under IAS 14 and when information environments are less transparent? RQ3 How does IFRS 8 affect properties of analyst forecasts and market liquidity?
Li, Richardson and Tuna (2012)	FAS 131, IAS 14 and IFRS 8 324,892 company-years in the period 1998-2010. Some non-US companies used IAS 14 then IFRS 8. The focus of the study is not about the use of either of these Standards.	RQ1 Is information about a company's geographical exposure useful for forecasting company fundamentals and stock returns?
Lucchese and Di Carlo (2012)	A study of 64 listed Italian companies (54 non-financial and 15 financial) in 2008 (last year of IAS 14) and 2009 and 2010 when IFRS 8 was used.	RQ1 What are the characteristics of segment disclosures before and after IFRS 8? RQ2 What items are disclosed? What is the level of disclosure? RQ3 Are segment disclosures associated with entity characteristics?

Pardal and Morais (2012)	IFRS 8 v. IAS 14 Spain Listed companies (131) in FYE 2009. A range of industries included (financial 24 per cent; construction 12 per cent; utilities 8 per cent; food 5 per cent; paper 5 per cent).	RQ1 What segments are disclosed? RQ2 What items were disclosed in segment notes for operating segments and entity-wide segments? Do companies comply with IFRS 8? RQ3 What company attributes are associated with the segment disclosure score?
Vorst (2012)	IFRS 8 EU countries 33 EU companies (from eight countries) that were early appliers of IFRS 8	RQ1 Do companies disclose more segments under IFRS 8? RQ2 What items of information are included? RQ3 Is application of IFRS 8 associated with lower cost of capital?
Weissenberger and Franzen (2012a)	IFRS 8 v. IAS 14 Germany Listed companies (71) from HDAX and SDAX from eight industry groups. Data is collected for the last year of IAS 14 (2008) and the first year of IFRS 8 (2009). Early appliers are excluded.	RQ1 Did number of segments increase? RQ2 Did the number of items per segment increase? RQ3 Did the amount of geographical segment disclosure and the disaggregation of geographical areas increase?
Weissenberger and Franzen (2012b)	IFRS 8 early appliers v. mandatory appliers Germany Listed companies that early applied in 2007 and 2008 (55 companies) are compared to 135 mandatory appliers in 2009. Companies are from nine industry groups (industrials 28 per cent; technology 19 per cent; consumer services 12 per cent; and others).	RQ Is mandatory application of IFRS 8 is associated with lower information asymmetry?
Wilkins and Khoo (2012)	FRS 8 v. FRS 14 (IFRS 8 v. IAS 14) Singapore 1,272 listed companies that changed from FRS 14 (IAS 14) to FRS 108 (IFRS 8) in 2009-2010, the first year of adoption.	RQ1 Do companies allocate capital more efficiently under FRS 108?
Zelinschi, Levant and Berland (2012)	A study of the impact of application of IFRS 8, based on an analysis of the financial statements of 26 listed French companies and interviews with 40 representatives of 33 companies (including the 26 providing annual reports for analysis).	RQ What reasons do organisations give for adopting 'decoupling' behaviour when under coercive pressure?

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Appendix B: Academic research on IFRS 8—Summary of findings

Published or forthcoming

Crawford *et al.* (2012)

A study of 150 listed UK companies' segment disclosure for the last year of IAS 14 and the first year of IFRS 8. The companies' financial year-ends were 31 December 2008 and 2009. The sample includes 99 FTSE 100 companies and 51 FTSE 250 companies.

RQ1: Did segment disclosure change under IFRS 8?	
Nature and number of segments	<p>The number of operating segments is, on average, higher, because it increased from 3.30 to 3.56 segments (Table 2A). However, 62 per cent of companies did not change the number of business segments.</p> <p>On average, the number of geographical segments based on location of customers increased from 3.68 to 4.09 segments (Table 2A). The number of geographical segments based on location of assets is not significantly different under IFRS 8.</p> <p>The study finds that 54 per cent of companies did not change geographical (location of customers) segments and 52 per cent of companies did not change geographical (location of assets) segments.</p>
Items reported for each segment	<p>The mean number of items per operating segment declined significantly from 7.02 to 6.43 (Table 3A).</p> <p>More companies disclose segment revenue to external customers (from 87 per cent to 91 per cent). Fewer companies disclose amounts for all of the line items that were required under IAS14, eg capital expenditure (from 83 per cent to 77 per cent), liabilities (from 84 per cent to 60 per cent), and total carrying amount of assets (from 87 per cent to 83 per cent). More companies disclose items for interest revenue, interest expense, income tax expense and minority interests under IFRS 8.</p>
Entity-wide disclosure	<p>The mean number of items for secondary (IAS 14) compared to entity-wide (IFRS 8) segments declined significantly from 2.02 to 1.06 (Table 3B).</p> <p>Fewer companies disclose amounts for capital expenditure by location (from 64 per cent to 14 per cent) and carrying amount of assets by location (from 65 per cent to 17 per cent).</p> <p>Under IFRS 8, 80 per cent of companies provide revenue from external customers by products and services, 85 per cent provide revenue from external customers by geographical area and 21 per cent provide information about major customers (Table 3D).</p>
Measure of segment profit	<p>A minority of companies disclose use of non-IFRS measures. Reconciliations (non-GAAP to IFRS) are not provided.</p>
Reconciliation	<p>The number of companies providing a reconciliation of segment revenue and entity revenue is the same (85 per cent—85 per cent). The number of companies reconciling segment and entity operating profit is lower (78 per cent to 68 per cent). Segment assets reconcile to entity assets for 79 per cent of companies (84 per cent under IAS 14)</p>

	and segment liabilities reconcile to entity liabilities for 52 per cent of companies (72 per cent under IAS 14). Fewer companies reconcile segment data to IFRS earnings (profit after tax) (57 per cent to 45 per cent). More companies reconcile segment data to profit before tax (13 to 29 per cent) (Table 4).
Identity of CODM	The majority of companies (69 per cent) disclosed the name of the CODM.
<i>Other</i>	
Narrative information in segment notes	The word count of segment notes increased. <i>Conclusion:</i> more narrative information now accompanies segment note disclosure.
Narrative information in Annual Report	For some companies discussion of business structure in narrative reports may not be consistent with IFRS 8 segments. On average, there are four operating segments and four geographical (customer) segments in the segment note, but additional operating and geographical segments are described in the annual reports (Table 7).
Small and large companies	Impact of IFRS 8 application differs (a) between FTSE 100 and FTSE 250 companies and (b) between industries. Mining companies have the largest number of segments and consumer goods sector companies the fewest. Financial sector companies are more likely to provide a matrix presentation and to provide the most items of disclosure of any sector.

RQ2: Is IFRS 8 more useful for making decisions than IAS 14?
Comments from interviews (n = 20. Six preparers, seven auditors, seven users)
1. Interviewee view: use of non-IFRS measures in IFRS 8 segment note is infrequent
2. Preparers welcomed the management approach. Auditors and users were less enthusiastic. According to preparers, the benefits are (i) reporting through the eyes of management and (ii) providing more useful information (eg non-GAAP earnings). Users are concerned about companies' flexibility to hide unfavourable results and the lack of comparability between companies. Auditors considered the Standard uncontroversial.
3 Interviewee concerns: 3.1 Disclosure of commercially sensitive information. 3.2 Level of aggregation in constructing segments (there is more detail in the narrative than in the segment note). 3.3 Materiality thresholds for separate identification of a segment.
4 Author comments: Interviewees did not seem to understand the concept 'entity-wide disclosure'.

Mardini et al. (2012)

IFRS 8 v. IAS 14 for 109 Jordanian listed companies

A comparison of data presented in segment reports under IAS 14 and IFRS 8 for FYE 31 December 2008 and 2009 (one year pre- and one year post-application of IFRS 8).

RQ1: What is the impact of IFRS 8 on disclosure? RQ2: To what extent does IFRS 8 segment disclosure differ from disclosure under IAS14?

Definition of segments	The number of companies providing segment information increased from 36 (33 per cent) to 47 (43 per cent). Segments were based on line of business. Ten companies provided geographical segments and 37 provided geographical information as entity-wide disclosures. The number of companies providing no segment information decreased from 52 (47 per cent) to 42 (38 per cent).
Number of segments	There was no significant difference in the number of segments disclosed: mean (median) 2.4 (2) under IAS14 and 2.7 (2) under IFRS 8. 43 companies (61 per cent) made no change to the number of segments reported and 18 (26 per cent) increased the number of segments. Forty companies (57 per cent) made no change to geographical/entity-wide disclosures and 24 companies (34 per cent) increased geographical/entity-wide disclosure.
Items reported	Twenty three companies (33 per cent) made no change to the number of segment items reported and 38 (54 per cent) increased the number of items. Overall, the items that were required under IAS 14 were still published in 2009 and new items were added under IFRS 8. Companies did not use non-IFRS measures when reporting segments under IFRS 8.
Geographic areas	40 companies (57 per cent) made no change to geographical segment definitions and 13 companies (18 per cent) provided new information under IFRS 8. Six companies (8 per cent) provided finer (individual country) geographic information while five companies (7 per cent) provided broader (continent or region) information.
CODM	24 companies (51 per cent) identified the CEO as the CODM. 18 companies (38 per cent) did not disclose the identity of the CODM.

Nichols *et al.* (2012)

This study includes 335 listed European companies from 12 EU countries and Norway and Switzerland. (The sample was selected on the basis of national stock market indices.) Eleven industry sectors are included (manufacturing 40 per cent; finance, insurance and real estate 23 per cent; mining 6 per cent; communications 6 per cent). Data is collected for one year pre- and one year post-application of IFRS 8 (31 December 2008 and 2009) to allow a comparison between IAS 14 and IFRS 8. The sample includes 32 early applying companies.

RQ1 Early application	Among sample companies 32 early applied IFRS 8. Some explanations for the change were: four companies changed management structure, eleven had no change in reportable segments; two disposed of segments; and six had major acquisitions.
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RQ2 Narrative information—consistency	<p>IFRS 8 BC 6(d) stated that prior US research showed improvement in consistency (between segment note disclosures and narrative discussion) when FAS 131 was applied. However, other research suggests reporting under IAS14R was already consistent with other section of narrative reports (p. 8).</p> <p>This study finds that for 96 per cent of companies, segment information is consistent with 'other sections' of annual report (narrative reports eg management report, financial review, MD&A).</p>
RQ3 Type of segments	<p>In the sample of n=335, 75 per cent of companies provide LOB segments (67 per cent pure, 6 per cent matrix, 2 per cent mixed), 19 per cent provide geographical (12 per cent pure, 5 per cent matrix, 2 per cent mixed) and 6 per cent provide a single segment report (Table 3).</p> <p>Under IAS 14 25 companies reported LOB segments. They changed to other presentations as follows: geographical (5 companies), matrix LOB (8); matrix geographical (8); mixed LOB (2); mixed geographical (2).</p> <p>Under IAS 14 15 companies reported geographical segments. They changed to other presentations as follows: LOB (7 companies), matrix LOB (1); matrix geographical (4); mixed geographical (2); single segment (1) (Table 4).</p> <p>There is little change in the number of companies reporting a single segment (23 to 20).</p>
RQ4 Number of segments	<p>On average, more segments are disclosed (from 3.84 to 4.19 segments, a significant change, Table 5). However:</p> <ul style="list-style-type: none"> 62 per cent of companies do not change the number of segments. 27 per cent of companies increase the number of segments. 11 per cent of companies decrease the number of segments. <p>The average number of segments increased in all countries except Switzerland.</p>

RQ5 Items reported for each segment	<p>Profitability: disclosed by 100 per cent of companies (pre- and post-IFRS 8) (Table 6).</p> <p>Companies report significantly more measures of segment profitability under IFRS 8. Companies reporting one measure declined from 82 per cent to 75 per cent. Companies reporting two measures increased from 14 per cent to 19 per cent. Companies reporting three measures increased from 4 per cent to 6 per cent.</p> <p><i>Conclusion:</i> IFRS 8 leads to more information about segment profitability.</p> <p>Most companies (83 per cent) use a non-GAAP measure of profitability in the segment report (Table 6). Comparison of the pre- and post-IFRS 8 measures are:</p> <ul style="list-style-type: none"> Operating profit (from 57 per cent to 57 per cent of companies) EBIT (from 19 per cent to 23 per cent) EBT (from 20 per cent to 56 per cent) EBITDA (from 8 per cent to 16 per cent). <p>Segment assets: decline in disclosure (from 96 per cent to 93 per cent of companies).</p> <p>Segment liabilities: decline in disclosure (from 87 per cent to 71 per cent of companies, significantly different) (Table 6).</p> <p>Balance sheet information: the percentage of companies that provide disclosure on equity method investments (decline from 41 per cent to 30 per cent) and capital expenditure (decline from 81 per cent to 73 per cent) is significantly lower (Table 6).</p> <p>Voluntary disclosures: the percentage of companies that provide disclosure on items (list of six) is lower (not significantly) (Table 6).</p> <p><i>Conclusion:</i> IFRS 8 does not lead to disclosure of more items of segment information.</p>
RQ6 Reconciliation	<p>Most companies use a profit measure that appears in their income statement. In 34 cases (Table 7 line c) where the segment profit measure does not appear in the income statement, 31 companies provide reconciliations between the profit measure in the segment report and the profit measure in the income statement (Table 7).</p>
RQ7 Entity-wide disclosure	<p>Companies provided the following entity-wide disclosures under IFRS 8 (Table 8):</p> <ul style="list-style-type: none"> Geographical: 77 per cent of companies Product/service: 17 per cent of companies Major customers: 6 per cent of companies. <p>There is little change in the number of companies reporting sales revenue and assets under IAS14 and IFRS 8. However, the number reporting capital additions declines significantly (47 per cent to 13 per cent) (Table 9).</p> <p>There is a significant decline in broad groupings for geographical segment (under IAS14) (from 17 per cent to 10 per cent of companies) and an increase in country-specific disclosure (from 13 per cent to 18 per cent) and mix of countries and regions disclosure (from 25 per cent to 29 per cent) (Table 10).</p> <p><i>Conclusion:</i> IFRS 8 does not lead to loss of geographical segment information.</p>

RQ8 Identity of CODM	The identity of the CODM is disclosed by 36 per cent of companies (eg Board of Directors, senior management group, senior individual executive). Three per cent of companies specify the Board of Directors as the CODM.
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Kang and Gray (2012)

A study of 189 Australian listed companies in 2008 and 2012. A range of industries is included (energy/materials/industrials 24 per cent; consumer discretionary/staples 17 per cent; financials 19 per cent; others 15 per cent).

RQ1 Does format and identification of reportable segments change under IFRS 8?	<p><i>Test:</i> Record the basis for reporting segments.</p> <p><i>Result:</i> there is no change in the identification of primary (operating) segments between 2008 and 2010 (LOB is 78 per cent and GEO is 22 per cent).</p> <p>On average, companies disclosed 3.19 segments in 2008 and 3.63 segments in 2010 (a significant increase). There was no increase in the number of geographical segments from 2008 to 2010.</p>
RQ2 Does the number of reportable segments increase under IFRS 8?	<p><i>Test:</i> Count the segments.</p> <p><i>Result:</i> the number of reportable segments is the same for 45 per cent of companies; it decreased for 15 per cent; and increased for 40 per cent.</p>
RQ3 Does the extent of segment information disclosed increase under IFRS 8?	<p><i>Test:</i> Review accounting policy note and segment note.</p> <p><i>Result:</i> the extent of segment disclosure is similar for 42 per cent of companies; decreased for 13 per cent; and increased for 45 per cent.</p>
	<p>Fourteen companies (7.4 per cent) are early appliers of IFRS 8.</p> <p>The CODM is identified by 155 (82 per cent) companies.</p>

Pisano and Landriana (2012)

A study of 124 listed companies in 2008-2009. The sample includes non-financial companies from a range of industries including manufacturing 33 per cent; media and telecommunication 14 per cent; utilities 11 per cent; clothing 9 per cent; other 33 per cent.

<p>Number and type of segments; items of segment disclosure</p>	<p>Comparing firms that disclosed segment information under IAS14 and IFRS 8, 75 per cent made no change in the number of segments; 14 per cent increased disclosure and 11 per cent decreased disclosure. Only 4 per cent of firms gave the same number of segments but changed the composition of segments.</p> <p>There is very little change in the proportion of firms providing segments based on LOB (84 per cent in 2008 and 85 per cent in 2009). Geographical segments were provided by 13 per cent of firms in 2008 and 12 per cent in 2009.</p> <p>The average number of segments increased from 3.71 to 3.85. The average number of items of disclosure increased from 8.47 to 10.33. Among 119 firms, 23 per cent made no change in the number of items; 55 per cent increased the number of items and 22 per cent decreased the number of items.</p> <p>Disclosure of IAS 14 required items compared to items reported to the CODM under IFRS 8 is largely consistent for segment revenue, depreciation and amortisation, material non-cash expenses, equity method income, investments in associates and joint ventures. Fewer companies include items for liabilities and capital additions. The number of companies disclosing income tax and additions to non-current assets has increased (13 per cent to 28 per cent; and 19 per cent to 26 per cent).</p> <p>Some companies did not comply with IFRS 8; eg only 94 per cent provided the segment result and 82 per cent provided segment assets.</p>
<p>RQ1-2 Is segment disclosure (and variation in segment disclosure) associated with level of industry competition?</p>	<p><i>Test:</i> Is the number of segments positively associated with measures of industry concentration?</p> <p><i>Result:</i> yes. Firms in more competitive (lower concentration) industries, larger firms, firms with lower debt and less profitable firms have more items in their segment note disclosure. There are more items in segment notes under IFRS 8.</p>

*Working papers***Aleksanyan and Danbolt (2012)**

A study of 127 UK listed companies, using data from 2002-2004 (SSAP 12), 2006-2008 (IAS14) and (2010) IFRS 8.

RQ1. To what extent did SSAP 25, IAS 14 and IFRS 8 affect the number and types of segments reported?	Under IFRS 8 companies disclosed 8.8 segments on average, compared to 7.2-7.3 under IAS 14. The average number of both LOB and geographical increased under IFRS 8. Only 23 per cent of companies select geography as their primary basis of reporting. Around 75 per cent of companies altered the number of segments when IFRS 8 was adopted.
RQ2. Did the adoption of each standard reduce the aggregation level of the geographical areas?	Segments were generally defined in broader terms than by individual country; only 43 per cent of companies report single-country segments. There was a 70 per cent increase in the number of single country segments under IFRS 8, probably because of the requirement to report domestic and individual material foreign countries. The increase relates to LOB companies because the number of single country segments decreases for companies choosing geographical region as their primary reporting basis.
RQ3. To what extent did each standard affect the type and volume of segment information disclosed (a) for different types of segments, and (b) per reporting company? Did the standards increase the volume of segmental profitability information?	IAS 14 resulted in a 60 per cent increase in the volume of mandatory segment information and IFRS 8 resulted in a further 8 per cent increase. The volume of both LOB and geographical information is greater under IFRS 8. Both IAS 14 and IFRS 8 provide less segment profitability information than SSAP 25. Profit margins could be calculated for 90 per cent of reported segments under SSAP 25, 60 per cent of segments under IAS 14 and 54 per cent under IFRS 8. For geographical segments, investors could infer segment profitability for 85 per cent of segments under SSAP 25 but for only 25 per cent of segments under IFRS 8.

Bugeja *et al.* (2012)

A study of 1,617 listed Australian companies using data from one year pre- and one year post-application of AASB 8 (in the period 2009-2010). (AASB 114 = IAS 14 and AASB 8 = IFRS 8.)

RQ1 Do companies disclose more segments under IFRS 8?	<p>On application of IFRS 8, 79 per cent of companies did not change the number of segments and 17 per cent increased the number of segments. The number of single-segment companies reduced by 12 per cent.</p> <p>Considering companies that did not change the number of segments, disclosure of specific line items by segment decreased in all categories, except segment results. For assets there is a reduction in the number of companies disclosing from 227 to 244; liabilities 227 to 218; revenue 277 to 274; capital expenditure 227 to 160; depreciation 277 to 200.</p>
RQ2 Is the increase in number of segments associated with: company diversity; making a loss; or industry competition?	<p>On average, companies changing from single-segment to multi-segment reporting were more profitable and operated in fewer industries. Multi-segment firms that increased the number of segments were more profitable, but not more diverse. Both groups of changers had higher market to book ratio (a possible proxy for growth potential) than companies that did not change their number of segments.</p>
RQ3 Is the increase in number of segments positively associated with segments making an operating loss?	<p>The increase in the number of reported segments is positively associated with the number of segments reporting a loss.</p>
RQ4 Is segment disclosure positively related to industry concentration?	<p>The increase in the number of reported segments is not associated with a company's industry concentration ratio. Companies revealing additional segments are more likely to be larger, more profitable (higher ROA) and operating in more unique industries.</p>
RQ5 When there is no change in number of segments, does segment disclosure decrease under IFRS 8?	<p>Companies that do not change the number of segments reported under IFRS report fewer line items. The item with the greatest decrease in disclosure is was segment capital expenditure. Companies providing fewer line items were more likely to have fewer loss-making segments and to be operating in more concentrated industries. The increase in the number of reported segments is positively associated with the number of segments reporting a loss.</p>

Demerens *et al.* (2012)

A study of 179 European intermediate-sized listed companies from Germany, France, the UK and Italy using data from one year pre- and one year post-application of IFRS 8 (in the period 2007-2010). The sample includes non-financial companies from a range of industries including information technology and telecommunications 34 per cent; industrials 27 per cent; consumer goods and services 20 per cent; energy and materials 12 per cent; and health care 7 per cent.

RQ1 What are the segment reporting practices of intermediate-sized companies?	<p>Most companies (137, 70 per cent) report line of business segments, 53 companies (27 per cent) report geographical segments and 7 (4 per cent) provide matrix disclosures. The distribution is similar for companies from all four countries. There are no significant differences between industry segments in the number of segments and the number of items per segment.</p> <p>Companies presenting geographical information tend to provide less information than those presenting LOB segments. Italian companies are more likely to use a greater number of geographical segments while German companies are more likely to present fewer geographical segment items (than companies from other countries). Companies from the UK are more likely to present fewer LOB segment items.</p> <p>The authors report that choice of LOB or geographical segment disaggregation is similar to that of large EU companies. The number of reported segments tends to be smaller.</p>
RQ2 To what extent do companies comply with IFRS 8?	<p>The authors report a lower level of compliance by sample companies compared to results of studies of large EU companies. Nearly one-third (29 per cent) of companies do not provide any explanation of the basis of segment reporting. A measure of segment profit/loss is provided by 84 per cent of companies (compared to 89 per cent in Nichols <i>et al.</i> (2012) and 100 per cent in Crawford <i>et al.</i> (2012). Segment assets are disclosed by 73 per cent of companies and segment liabilities by 58 per cent of companies.</p> <p>Disclosure of income statement items also tends to be lower than observed in other studies of large companies. For example, amortisation is disclosed by 69 per cent of companies; capital expenditure by 48 per cent; and the value of equity method investments by 4 per cent.</p> <p>There is little disclosure of entity-wide information or additional geographical information. Most companies provide key reconciliations (revenue and earnings) but reconciliations of assets and liabilities are more uncommon.</p> <p>Companies providing LOB segments are less likely to provide geographical information about segment revenue, assets and capital expenditure in secondary segment information. Conversely, companies providing geographical segments are more likely to provide LOB information about segment revenue, assets and capital expenditure in secondary segment information.</p>
RQ3 What segment information is 'voluntarily' reported?	<p>Companies tend to provide extra segment information on revenue (38 per cent). Many companies report EBIT (69 per cent) and other measures EBITDA (22 per cent) and net income (18 per cent). The rate of disclosure for revenue and EBIT is higher than that reported by Nichols <i>et al.</i> (2012) for large EU companies.</p>
RQ4 How many companies are early adopters?	<p>Fourteen companies (7 per cent) were early adopters of IFRS 8.</p>
RQ5 Are there country differences in segment reporting?	<p>UK companies provide more segment information about assets and liabilities and the value of investments. German companies tend to have a higher rate of disclosure than companies from other countries, except for segment assets and liabilities. French companies often have lower than average disclosure rates, particularly for segment capital expenditure, information about main customers and depreciation expense.</p>

RQ6 Are differences in segment reporting linked to type of business activity?	Generally, the rate of disclosure does not differ between industry sectors, except for the energy and materials sector, in which disclosure is significantly greater than other sectors on many items including explanation of segments, segment profit/loss, assets, intersegment revenue, depreciation and amortisation, capital expenditure and reconciliation to profit and loss.
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He, He and Evans (2012)

A study of 173 listed Australian companies using data from one year pre- and one year post-application of AASB 8 (in the period 2008-2010). The companies were from nine industry sectors including industrials (28 per cent); materials (20 per cent); consumer discretionary (18 per cent); and energy (10 per cent). (AASB 114 = IAS 14 and AASB 8 = IFRS 8).

RQ1a Do companies report more segments after application of AASB 8?	<p><i>Test:</i> count the number and type of segments under AASB 114 and AASB 8.</p> <p><i>Result:</i> the average number of segments is 2.6 under AASB 114 and 3.1 AASB 8 (median 2 and 3). The increase is significant (Table 6).</p> <p>Most companies (78 out of 173 or 45 per cent) made no change in the number of segments. 67 companies (39 per cent) increased and 28 (16 per cent) decreased the number of segments (Table 7).</p> <p>Most companies use LOB for operating segments. Eight (5 per cent) more companies use LOB under AASB 8 than previously. Ten (6 per cent) fewer companies reported geographical segments under AASB 8 than previously (Table 5).</p> <p>Companies using a matrix increased from one to 16 (8 per cent increase). 19 companies (11 per cent) disclosed segment information for the first time under AASB 8. Ten of these companies were in the energy and materials sector. The number of single-segment companies decreased by 13 (7 per cent).</p>
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<p>RQ1b Do companies report less segment information?</p>	<p><i>Test:</i> count the number of items in each segment under AASB 114 and AASB 8. <i>Result:</i> the average number of items is 6.35 under AASB 114 and 6.28 under AASB 8 (median 7 and 7). The decrease is not significant (Table 9).</p> <p>Many companies (63 companies, 36 per cent) made no change in the number of items. 51 companies (29 per cent) increased and 59 (34 per cent) decreased the number of segments.</p> <p>There was an increase in number of companies disclosing these items: intersegment revenue, interest expense, interest revenue, income tax and income.</p> <p>There was a decrease in the number of companies disclosing these items: liabilities, capital expenditure and assets.</p> <p>Considering the companies that presented multiple segments under both AASB 114 and AASB 8, the average number of items declined from 9.1 to 8.2 (median 9 and 8). The decrease is significant (Table 9).</p> <p>Another measure of the amount of segment information presented is the Herfindahl Index (a measure of market concentration, based on amount of segment revenue). The study reports that the H Index, on average, declines significantly from 0.72 to 0.67, indicating that information is more disaggregated under AASB 8. (Note: the H index is based on segment revenue only and thus is not informative about other segment items) (Table 8).</p>
<p>RQ1c Do companies report less geographical information after application of AASB 8?</p>	<p><i>Test:</i> count the number and type of segments under AASB 114 and AASB 8. <i>Result:</i> the average number of geographical areas is 2.2 under AASB 114 and 2.4 under IFRS 8 (median 2 and 2). The increase is significant. The number of items reported for each segment decreases significantly (Table 10).</p> <p>Most companies (103 companies, 60 per cent) made no change in the number of geographical areas. 67 companies (39 per cent) increased and 28 (16 per cent) reduced the number of areas. Most companies (78 companies, 45 per cent) made no change in the number of items in each geographical area. 40 companies (23 per cent) increased and 55 (32 per cent) decreased the number of items.</p> <p>The number of companies reporting geographical revenue increased (8 companies, 9 per cent increase). The number reporting assets decreased (6 companies, 7 per cent decline). The number presenting capital expenditure decreased (42 companies, 53 per cent decline).</p>
<p>RQ2 Does analyst forecast accuracy increase, and dispersion decrease, after application of AASB 8?</p>	<p><i>Test:</i> regression models test the association of (a) analyst forecast accuracy and (b) analyst forecast dispersion and explanatory variables (size, volatility and forecast horizon) in the pre-period and the post-period. <i>Result:</i> accuracy is greater under IFRS but disagreement is not significantly different in the pre- and post- period.</p> <p>Additional tests of levels of information uncertainty and analyst consensus show that they are not significantly different in the pre- and post-period (Table 13).</p>

Heem and Valenza (2012)

A study of accounting practices pre- and post-IFRS 8 for 37 of the CAC 40 French stock market index companies. Data was extracted from the first half-yearly reporting under IFRS (in the period 2007-2009, including eight early appliers)

RQ1 Do companies disclose more segments under IFRS 8?	<i>Test:</i> count segments under IAS 14 and IFRS 8. <i>Result:</i> the average number of segments is 2.8 under IAS 14 and 2.8 under IFRS 8 (median 2 and 2.5) (Table 3). One company increased the number of segments (12 to 13), six reduced the number and 29 made no change (Table 4).
RQ2 What items of information are included?	<i>Test:</i> count line items in the segment note. <i>Result:</i> the average number of items is 2.06 under IAS 14 and 1.94 under IFRS 8 (median 2 and 2) (Table 7). Six companies increased the number items, two reduced the number and 28 made no change (Table 5).
	<i>Conclusion:</i> for 80 per cent of sample companies, segment reporting is largely unchanged from IAS 14 to IFRS 8. For many companies, segments are the same under both Standards.

Kajüter and Nienhaus (2012)

The study includes 110 German companies listed on HDAX for four years 2007-2010 (n= 286; excludes financial services companies). Companies have at least three reported segments. The IAS 14 and IFRS 8 comparison is based on 66 companies. The study uses data collected from financial statements and databases.

RQ1 What is the value relevance of segment information compared to other financial statement information?	<i>Test:</i> is the amount of a company's segment earnings (EBIT) and segment assets associated with its share price? <i>Result:</i> adding segment earnings (but not segment assets) to a model including book value of equity and book value of assets improves the explanatory power of the model. <i>Conclusion:</i> the models show that information users find measures of segment earnings (based on EBIT) to be useful.
RQ2 How useful are items in segment reports?	<i>Test:</i> split sample as follows: companies with high or low (a) variability of segment profit; (b) number of reported segment items; and (c) number of reported segments. <i>Result:</i> segment information is more value-relevant in the group that has: (a) low variability of profit; and (b) fewer reported items.
RQ3 Is IFRS 8 information more value-relevant than IAS 14 information?	<i>Test:</i> use IAS 14 data from the year prior to IFRS application. Compare it to IFRS 8 data for the same year (because companies restate the prior year data when they apply IFRS 8). Is value relevance the same for IFRS 8 and IAS 14 data? <i>Result:</i> IFRS 8 data is more value-relevant. Robustness tests comparing models in 2007 and 2008 (IAS 14) and in 2009 and 2010 (IFRS 8) also support the conclusion.

Leung and Verriest (2012)

A study of 844 listed European non-financial companies from 16 EU countries and Norway and Switzerland. Companies had more than 50 per cent foreign sales in 2009. A comparison of IAS 14 and IFRS 8; one year pre- and one year post-application of IFRS 8 (31 December 2008 and 2009).

RQ1 How does IFRS 8 impact on segments disclosure?	<p>The average number of geographical segments increases significantly from 4.61 to 5.05. The 'finessness' of geographical segments also increases significantly (2.37 to 2.51). (Finessness measures the extent of disaggregation of segments.)</p> <p>For geographical segments, the average number of items reported declines significantly, from 3.81 to 3.04. The number of companies reporting segment profit information declines significantly (from 281 to 229) and the average number of profit measures declines from 0.49 to 0.42.</p> <p>For line of business segments, more companies report segment profit (587 compared to 559) and the average number of profit measures increases to 1.26 from 1.18. There are fewer single-segment companies (43 compared to 48).</p>
RQ2 How does the impact vary with poor-quality reporting under IAS-14 and when information environments are less transparent?	<p>The increase in number and 'finessness' of geographical segments is more likely to be observed for 'compliant' companies. (Compliant companies are defined as those that complied with IAS 14 requirements for disclosure of secondary geographical information.)</p> <p>Multivariate analysis shows 'finessness' of geographical segments under IFRS 8 is associated with higher quality financial reporting (proxied by discretionary accruals), higher forecast accuracy and having a BIG 4 auditor.</p>
RQ3 How does IFRS 8 affect properties of analyst forecasts and market liquidity?	<p>Properties of analyst forecasts (accuracy and dispersion) and bid-ask spread are not significantly different under IFRS 8. This finding also applies to companies that improved their segment reporting under IFRS 8 (by increasing the number of segments, number of items, reporting of profit and geographical 'finessness').</p>

Li, Richardson and Tuna (2012)

A study of 324,892 company-years in the period 1998-2010. Some non-US companies used IAS 14 and then IFRS 8. The focus of the study is not about the use of either of these Standards.

<p>RQ1 Is information about a company's geographical exposure useful for forecasting company fundamentals and stock returns?</p>	<p><i>Test:</i> the study uses segment information (from companies' segment note disclosures) and country-level predictions of economic growth to test whether the combined data is relevant in predicting future profitability and returns and is useful for analysts.</p> <p><i>Result:</i> the country exposure data improves prediction of future return on assets. Analyst forecast revisions and stock returns incorporate the country exposure information (with a lag). The relationship is stronger for non-US companies (including IFRS companies), but the authors have not linked the effect to use of IAS 14 or IFRS 8.</p>
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Lucchese and Di Carlo (2012)

A study of 64 listed Italian companies (54 non-financial and 15 financial) in 2008 (last year of IAS 14), 2009 and 2010 when IFRS 8 was used.

<p>Number and type of segments; items of segment disclosure</p>	<p>Comparing companies disclosing segment information under IAS 14 and IFRS 8, 75 per cent made no change in the number of segments; 16 per cent increased and 9 per cent reduced the number of segments.</p> <p>There is very little change in the proportion of companies providing segments based on LOB over the period (81 per cent in 2008 and 2009; 83 per cent in 2009). Geographical segments were provided by 9 per cent of companies in 2008, 10 per cent in 2009 and 7 per cent in 2010.</p> <p>The average number of segments increased from 3.8 to 4 from 2008 to 2009 then declined from 4 to 3.9 from 2009 to 2010.</p> <p>The authors conclude that IFRS 8 did not cause 'considerable changes' from IAS 14 in the items disclosed because reporting under IAS 14 already reflected a management perspective.</p>
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Pardal and Morias (2012)

A study of 131 Spanish listed companies in FYE 2009. A range of industries is included (financial 24 per cent; construction 12 per cent; utilities 8 per cent; food 5 per cent; paper 5 per cent).

<p>RQ1 What segments are disclosed?</p>	<p><i>Test:</i> record the basis for reporting segments.</p> <p><i>Result:</i> LOB 71 per cent GEO 14 per cent Matrix (LOB and GEO) 7 per cent Single 7 per cent. On average, companies disclosed 3.63 segments.</p> <p>Entity-wide disclosure was provided by 70 per cent of companies. In this group, 55 per cent of companies provided disclosure based on geographical segments, 19 per cent on customer information and 14 per cent on products of services. In entity-wide disclosures companies disclosed 3.11 segments on average.</p>
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RQ2 What items were disclosed in segment notes? Do companies comply with IFRS 8?	<p><i>Test:</i> count the items included in the segment note.</p> <p><i>Result:</i> all companies included a profit and loss measure (not further described) and external revenue. Assets were included by 90 per cent of companies, liabilities by 89 per cent and depreciation and amortisation by 85 per cent.</p> <p>On average companies disclosed 8.5 items.</p>
RQ3 What company attributes are associated with the segment disclosure score?	<p><i>Test:</i> calculate a compliance score (total items reported/total items required to be disclosed). (The authors did not discuss issues associated with determining the coding score.)</p> <p><i>Result:</i> higher scores are associated with larger size, being cross-listed and lower profitability.</p>

Vorst (2012)

This study includes 32 EU companies (from eight countries) that were early appliers of IFRS 8. 25 companies changed from IAS 14 to IFRS 8.

RQ1 Do companies disclose more segments under IFRS 8?	<p><i>Test:</i> count the number and type of segments under IAS 14 and IFRS 8.</p> <p><i>Result:</i> the average number of segments is 4.44 under IAS 14 and 5.08 under IFRS 8 (median 4 and 4) (Table 6).</p> <p>Most companies (11, 44 per cent) made no change in the number of segments. Only three companies decreased the number while 11 increased the number of segments.</p> <p>Most companies use LOB for operating segments. Thirteen companies used LOB and did not change, while four used geographical and did not change. Three companies changed from LOB to mixed (Table 5).</p> <p>Comparing the geographical segments under IAS 14 and entity-wide geographical disclosures under IFRS 8, the study reports a significant increase in the number of reported segments (numbers of segments not provided).</p>
RQ2 What items of information are included?	<p><i>Test:</i> identify the line items and count how many companies disclose these line items under IAS 14 and IFRS 8.</p> <p><i>Result:</i> the average number of items reported is 12.1 under IAS 14 and 12.6 IFRS 8 (median 13 and 13). Six companies (24 per cent) made no change in the number of line items. Seven companies (24 per cent) decreased the number while 12 (50 per cent) increased the number of line items (Tables 13, 14).</p> <p>Items included reflect requirements of each Standard and the changes from IAS 14 to IFRS 8. For example, external revenue provided by 100 per cent of companies under both Standards; intersegment revenue provided by 80 per cent of companies under both Standards. For new required (if reviewed by the CODM) items (interest income, interest expense and income tax expense) the proportion of companies disclosing these items increased. The proportion of companies disclosing liabilities decreased from 92 per cent to 84 per cent (Table 12).</p> <p>In specific areas the increase in the proportion of companies providing disclosure was: external revenue by country of domicile (12 per cent increase); external revenue all other foreign countries (4 per cent increase); net current assets (32 per cent increase); major customers (12 per cent increase). The proportion of companies disclosing total assets for individual countries declined by 12 per cent (Table 11).</p>

RQ3 Is application of IFRS 8 associated with lower cost of capital?	<p><i>Test:</i> is early application of IFRS 8 associated with lower cost of capital?</p> <p><i>Result:</i> the study finds no evidence of lower cost of capital. The results are probably affected by the small sample size and the study period (2008), when share prices and earnings expectations were affected by specific economic conditions.</p>
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Weissenberger and Franzen (2012a)

This study includes 82 listed companies from the HDAX and SDAX indices from nine industry groups. Data is collected for the last year of IAS 14 (2008) and the first year of IFRS 8 (2009). Early appliers are excluded.

RQ1 Did number of segments increase?	<p>59 companies (81 per cent) did not change the number of segments and 12 (16 per cent) increased the number of segments. The number of single-segment companies declined by three. On average, the number of product and services segments increases significantly under IFRS 8 (from 3.1 to 3.2).</p> <p>Considering 73 multi-segment companies, 60 (82 per cent) define their operating segments by products and services, 7 (10 per cent) by geographical area and 5 (7 per cent) use a combination (one company uses other criteria). Practices are similar under IAS 14: 62 (85 per cent) of companies define their operating segments by products and services and 11 (15 per cent) by geographical area.</p>
RQ2 Did the number of items per segment increase?	<p>The average number of items disclosed for each segment is 13.1 under IFRS 8 and 14.1 under IAS 14 but the difference is not significant.</p> <p>However, there is less disclosure of some key items, notably liabilities. The proportion of firms disclosing earnings, assets and liabilities under IAS 14 and IFRS 8 is: earnings 100 per cent under both Standards; assets from 99 per cent to 82 per cent; liabilities from 99 per cent to 66 per cent.</p> <p>68 (93 per cent) of companies provide EBIT earnings measures under IAS 14 and sixty-five (89 per cent) did so under IFRS 8. 21 (29 per cent) companies provide EBITDA earnings measures under IAS 14 and 25 (34 per cent) did so under IFRS 8.</p>

3 Did the amount of geographical segment disclosure and the disaggregation of geographical areas increase?	<p>58 (79 per cent) companies provide entity-wide geographical disclosures. The average number of segments is 4.7, significantly more than provided in secondary geographical segments under IAS 14 (4.4).</p> <p>The proportion of companies providing country-specific information has increased significantly (from 18 per cent to 34 per cent) and the proportion not disclosing their country of domicile separately decreased (from 21 per cent to 10 per cent).</p> <p>A large proportion of companies use only broad categories for geographical disclosures: under IFRS 8 42 per cent (IAS 14, 49 per cent) use supranational regions or continents even though these companies have high levels of foreign sales (average 54 per cent).</p> <p>The average number of items disclosed for each geographical segment is 3.4 under IFRS 8, which is significantly lower than the 4.5 items reported under IAS 14. Most companies limit disclosure to the number of items explicitly required by the Standard (Table 17). There is a lack of disclosure of geographical segment earnings: under IFRS 8 only four companies (IAS 14, seven companies) report this item.</p> <p>Entity-wide disclosure about major customers is also limited. Only 22 per cent of companies provide all required information about major customers.</p>
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Weissenberger and Franzen (2012b)

This study compares 55 listed companies that early applied IFRS 8 in 2007 and 2008 with 135 mandatory applicers in 2009. Companies are from nine industry groups (industrials 28 per cent; technology 19 per cent; consumer services 12 per cent; and others).

RQ Is mandatory application of IFRS 8 associated with lower information asymmetry?	<p><i>Test:</i> compare information asymmetry (measured by bid-ask spread) for companies applying IFRS 8 on the mandatory application date with companies that made voluntary early application. Include two years pre- (2007 and 2008) and two years post-application (2009-2010).</p> <p><i>Result:</i> the pre-post change in bid-ask spread is not significantly different for the 135 mandatory application companies compared the control group of early applicers. Bid-ask spread declines for the 135 companies, but the decline is not significantly different to that experienced by the control group.</p> <p><i>Conclusion:</i> the management approach has not been beneficial in the German capital market.</p>
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Wilkins and Khoo (2012)

A study of 1,272 listed Singaporean companies that changed from FRS 14 (IAS 14) to FRS 108 (IFRS 8) in 2009-2010, the first year of adoption.

<p>RQ1 Do companies allocate capital more efficiently under FRS 108?</p>	<p><i>Test:</i> identify companies that change (or do not change) their segment definitions under IFRS 8. Compare the internal capital allocation efficiency for the two groups of companies using a measure of cross-segment transfers.</p> <p><i>Result:</i> the average number of segments is 4.44 under IAS 14 and 5.08 under IFRS 8 (median 4 and 4) (Table 6).</p> <p>Most companies (996, 78 per cent) made no change in the number of segments. For companies increasing the number of segments (276, 22 per cent) the overall number of segments increased from 352 to 403.</p> <p>Companies that changed their segments are efficient in their internal capital allocations under both FRS 14 and FRS 108. Companies that did not change their segments did not demonstrate capital allocation efficiency under either Standard.</p>
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Zelinschi, Levant and Berland (2012)

A study of the impact of application of IFRS 8, based on an analysis of the financial statements of 26 listed French companies and interviews with 40 representatives of 33 companies (including the 26 providing annual reports for analysis).

Annual report analysis

After comparing annual reports following IAS 14 (2008) and IFRS 8 (2009) for segment reporting, the authors report the following:

- 19 of the 26 firms studied include the first level of analysis, presented in accordance with IAS 14. In some cases (Areva), certain segments are no longer shown because they have been discontinued. In others (Eiffage, SNCF), the names of segments change. In all these cases the move to IFRS 8 did not result in any change.
- Four firms kept the same segmentation under IFRS 8 as under IAS 14, using segments previously reported (first or second level of analysis) and grouping them (three cases) or splitting them (one case). In these cases the move to IFRS 8 did not result in any change.
- Lastly, two of the firms presented segments drawn from the IAS 14 segment reporting, but combining business and geographical segments. In these cases the move to IFRS 8 resulted in minor changes.
- In one of the cases examined (GDF Suez, a group that was newly formed in 2008) comparisons were impossible.

Firms generally used the business segments presented under IAS 14 as their operating segments for the purposes of IFRS 8. We noted that firms tend to keep the segmentation used prior to application of IFRS 8.

Interviews

Interviewees n = 40, from 33 companies, members of *Association des Directeurs de Comptabilité et de Gestion* (APDC). The interviewees were generally heads of accounting and management control (including 2 finance directors; 31 directors of accounting or heads of accounting departments; 6 management control officers; and 1 business analyst).

The authors summarise frequently-cited reasons for a lack of change when applying IFRS 8:

Primary reasons relate either to tensions arising from disclosure of information (23 firms), or technical specifics (13 firms), leading them to use uniform organisation and communication, regardless of the Standard concerned.

Secondary reasons: 8 firms justified their choice by saying they already applied SFAS 131, and 7 said they had made no changes to be consistent with the preferences of financial analysts.

The authors identify ten themes that go some way to explaining why IFRS 8 reports showed little change from IAS 14 reports. They include:

- pressure from financial analysts—the (actual or expected) opinions of analysts influence choices related to application of IFRS 8;
- application of SFAS 131—IFRS 8 is largely a reiteration of the equivalent US standard;
- sectorial logic—firms in certain sectors have long been structured in the same way;
- technical contingencies—because of specific technical constraints, some firms' organisational structure is influenced by their business activities;
- active mimicry—some firms adopt mimetic behaviour when IFRS 8 is introduced, in particular copying competitors' practices;
- reorganisations that took place before introduction of the Standard, as a result of previous events (eg mergers), affecting the division into operating segments;
- tensions over disclosure of information—application of IFRS 8 involves difficult decisions, particularly as regards the confidentiality and clarity of the information reported;
- Internal politics unrelated to the Standard—the firm's organisation is affected by political issues that must be taken into consideration when the operating segments are defined;
- divergent views on the Standard—disagreements between actors involved in application of IFRS 8 (general management, financial management, auditors, etc); and
- in certain firms, the organisational structure and information systems—which must constantly adapt to technological changes affecting their business.

Appendix C: Further research on IFRS 8—Other reports

This appendix includes a list of reports provided by regulators and other entities (Table 1). A summary of the reports' findings follows Table 1.

Table 1 List of reports

Author	Setting	Description of report/research
<i>Regulators</i>		
ESMA (2011)	IFRS 8 EU	Report on application of IFRS 8 and of significant challenges for investors, preparers or enforcers. The report makes reference to a review of financial statements for 118 entities in 2008 and 2009.
FRRP (2010)	PN 124	Comment issued following review of a sample of 2009 interim and 2008 annual accounts (early appliers).
<i>Analysts</i>		
CFA Institute (2012)	US GAAP FAS 131	Survey of members (n=367) in 2007 about views of segment presentation method (management approach vs modified management approach) and importance of disclosure line items.
CFA Society of the UK (2012)	IFRS 8	Survey of members (n=45) to obtain their views about application of IFRS 8.
La Société Française des Analystes Financiers (SFAF)	IFRS 8 France	Study of segment reporting by 53 non-financial sector companies (35 from CAC and 20 from NEXT). Data was collected from financial statements and investor presentations.
<i>Other</i>		
Backhuis and Camfferman (MAB 01-02)	IFRS 8 EU	Study of segment disclosure in annual reports of 50 EU non-financial companies from FTSE Eurotop 100 in 2009.
Blase, Müller and Reinke (2012).	IFRS 8 Germany	Study of 101 German DAX, MDAX and SDAX companies (fiscal year 2009), excluding financial service firms and companies that voluntarily applied IFRS 8 in earlier years.
Company Reporting (2012)	IFRS 8	Study of 24 European listed companies FYE 30 June 2010 considering segment disclosure in annual reports of companies (UK = 12; Germany = 4; Switzerland = 3; other = 5) after application of IFRS 8.
KPMG (2010)	IFRS 8 EU	Study of IFRS 8 implementation by 81 companies (drawn from the 2009 Fortune Global 500) from a range of countries (17, including European countries, Israel and Hong Kong) and industries (10).
Deloitte (2012)	IFRS 8 UK	Study of segment disclosure in the last year of IAS 14 and under IFRS 8 in 2011-2012 for a sample of 100 listed companies drawn from 1000 listed companies.

Summary of findings of other reports

ESMA (2011)

On the basis of this review, the overall conclusion reached by European enforcers is that (i) the implementation of IFRS 8 resulted in a fairly similar level of information compared to its predecessor IAS 14 and that (ii) there is homogeneity in the issues faced by European enforcers when enforcing this Standard. This stems from a combination of weaknesses in the Standard and a failure to fully comply with its requirements by issuers.

The following material, which identifies four topics that emerged from a review of 118 entities, is taken from the report (pp. 3-4).

(1) *Identification of the chief operating decision maker (CODM)*: 41 per cent of issuers with this information identified the Board of Directors as the CODM (although this body often includes non-executive members). This indicates that there might be some confusion caused by the definition of CODM in the Standard.

(2) *Aggregation of operating segments into reportable segments*: disclosures on aggregation of segments were explicitly mentioned by only 29 per cent of issuers, even though IFRS 8.22(a) refers to aggregation as helping investors understand the entity's basis of organisation. The level of subjectivity in deciding how aggregation should be applied may lead to diversity in practice.

(3) *Measurement basis for presentation of information*: 93 per cent of issuers used IFRS as a measurement basis for segment information and 47 per cent presented non-GAAP measures such as EBIT and EBITDA in the segment information. Information about allocation policies of profit or loss, assets and liabilities to reporting segments, definition of non-GAAP measures and the reconciliation between segment information and the amounts reported in the financial statements were often not disclosed properly.

(4) *Analysis of entity-wide disclosures*: 58 per cent of issuers provided information about revenues and non-current assets by geographical area. However, the notes to the financial statements rarely presented information for individual foreign countries and there is no common understanding on how the materiality concept should be applied in this context.

In addition, the quality and level of geographical segment information disclosed under IAS 14 and IFRS 8 was compared. A few entities changed their reporting basis (from a focus on geographical areas to a focus on business segments or vice versa). There is also limited evidence that the quality of information provided on geographical areas is lower than what was previously reported under IAS 14 in the cases for which the same basis applied.

As part of this review, ESMA also held discussions with organisations representing financial analysts. Generally, the investor community is concerned that the segmental information reported may not be consistent with the way in which management really looks at the activities to run the business. Analysts also consider that the present level of reconciliations on a reportable basis required by the Standard is unsatisfactory. Furthermore, the investor community is generally of the view that the information provided does not give meaningful information as it is not reported at a sufficiently low level of detail.

The report also contains proposals for amendments to the Standard (p. 4).

FFRP (2010)

The Panel reviewed a sample of UK listed companies' 2009 interim accounts and 2008 annual accounts (when they had early applied the Standard). Following the review, the panel asked a number of companies to provide additional explanations where:

- only one operating segment is reported, but the group appears to be diverse with different businesses or with significant operations in different countries;
- the operating analysis set out in the narrative report differs from the operating segments in the financial statements;
- the titles and responsibilities of the directors or executive management team imply an organisational structure that is not reflected in the operating segments; or
- the commentary in the narrative report focuses on non-IFRS measures whereas the segmental disclosures are based on IFRS amounts.

CFA INSTITUTE (2012)

The CFA Survey (2012) presents views of 367 members from a range of countries in 2007. Users are asked about their preferences regarding the management approach for segment reporting under US GAAP. Given the date of the survey, we must assume that these views relate to segment reporting under US GAAP. Respondents could have up to 10 years' experience of FAS 131, adopted in the period after 15 December 1997.

Key findings:

- (1) *Management approach vs modified management approach:* the modified management approach is preferred by 41 per cent of respondents; the management approach is preferred by 25 per cent; and 22 per cent consider both have similar relevance and usefulness. For 12 per cent neither is useful or they have no opinion.
- (2) The modified management approach is more likely to be preferred by respondents in the UK and continental Europe (57 per cent and 57 per cent respectively of that country's respondents) than in the US or Canada (32 per cent and 47 per cent respectively).
- (3) When asked about geographical disclosure, 76 per cent of respondents indicated that it was a useful complement to disclosure by nature.

Note: management approach—segments are determined based on how the entity manages the business. Segment information is based on managers' internal reporting. Non-GAAP measures are reconciled to consolidated financial statement data.

Modified management approach—segments are determined on how the entity manages the business. Segment information is based on GAAP and the totals of segment items agree to financial statement information.

CFA UK (2012)

A survey of members' views about application of IFRS 8 carried out by the CFA Society of the UK.

	Number of respondents	Disagree/strongly disagree	%	Neutral	%	Agree/strongly agree	%
Q1 Under IFRS 8, segmental reporting has enabled me to better understand companies.	45	8	18	13	29	24	53
Q2 IFRS 8 has improved comparability between companies	43	11	26	14	33	18	42
Q3 Under IFRS 8, the disaggregation of operating segments is sufficient	42	11	26	17	40	14	33
Q4 The use of non-IFRS information has made the figures more difficult to understand	41	15	37	12	29	14	34
Q5 Are non-IFRS profit definitions useful?	39	16	41			23	59
Q6 The information in reconciliations is useful	39	2	5	12	31	25	64
Q7 Do you think that important line items (eg cash flow, capex) have been omitted?	38	19	50			19	50

SFAF (2011)

The study (by Trapeza Consulting) reviewed the application of IFRS 8 by the companies of the CAC 40 and the NEXT 20 in 2010. The 53 companies included in the research represent all of the CAC 40 and NEXT 20 excluding financial institutions. Data was collected from the financial statements, directors' reports and the annual results presentation.

Key findings:

- Applying IFRS 8 allows great flexibility in presenting financial information. This flexibility was illustrated by the use of the company's own management (non-GAAP) indicators by nearly 50 per cent of the companies. Reasons for using non-GAAP indicators were:
 - (a) They wanted to present recurring, especially by restating costs of restructuring.

(b) They wanted to restate the impact of acquisition accounting in accordance with IFRS 3 *Business Combinations* by cancelling revaluation adjustments made on acquisition.

Some also used performance indicators specific to their industry. For example, the segment results of Total include the effects of stocks measured at replacement cost although that is not permitted by IAS 2 *Inventories*.

- This flexibility translates into a wealth of specific performance indicators. About 15 non-GAAP performance indicators were used by the companies in the sample. Insufficient information was provided to allow the reader to reconcile the entity’s own indicators with those in IFRS. In general, there is no connection between the company’s own indicator and the IFRS amounts and the two cannot be reconciled for 45 per cent of the companies studied.
- Some companies make significant use of the options allowed by IFRS 8. For example, STMicroelectronic made about 10 adjustments between operating profit and the operating income in the segment information without producing reconciling information at the level of each segment. Furthermore, as permitted by IFRS 8, the company used operating income as defined by US GAAP as its performance indicator at the segment level and only reconciled that at the group level.

France Telecom deconsolidated its UK subsidiary (held for sale) from its income statement, but included it as a joint venture in its consolidated accounts and segment information.

Safran’s published sector results included the impact of economic hedging that does not qualify as hedging under IAS 39 *Financial Instruments: Recognition and Measurement* in the IFRS consolidated Financial Statements. Safran also published adjusted consolidated Financial Statements using the same accounting treatment as in segment information.

- The amount that is unallocated, which is significant for some filers, reduces the quality of the information.

For 10 companies of the 53 in the sample, the part of the operating profit not allocated to a segment represented more than 10 per cent of the results.

‘Non-allocated’ operating profit covered a number of different components, reducing comparability.

The effect of not allocating even a modest share of the costs is necessarily greater on the final operating profit. For example, Arcelor-Mittal did not allocate 1.4 per cent of its costs, but that resulted in 29 per cent of the operating profit being attributed to the residual, non-allocated sector.

- The information supplied is generally consistent with other sector information such as notes, management commentaries, presentations.

The sole exception to this was Vallorec, which presented information by market in the management commentary, but information by sector in its segment note.

The report also notes that data about assets, investments and depreciation is often provided by segment if relevant. Only 13 per cent of companies, however, published information about capital employed (7 out of 53).

The report concludes that the analysts’ concerns at the time of the ED that comparison of information between companies would be limited were justified.

Segment information

	CAC 40	NEXT 20
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Number of segments:		
Average	6	5
Minimum	2	2
Maximum	13	9
Nature of segments:		
Type of activity	27	14
Geography	4	2
Mixed	4	2
Total	35	18

Frequency of reorganising segments

Of the 35 companies studied in the CAC, 25 per cent (9) changed their segments. Four did so because of discontinuing part of their operations; three because of acquiring new businesses and two for internal reorganisations.

Of the 18 companies studied in the NEXT, a third (6) changed their segments. Of these, 83 per cent (or 5 of the 6) did so because of an internal reorganisation or a change in the definition of the segments. The sixth changed because of acquisitions.

In the CAC 40 group, 20 companies used non-IFRS performance indicators. Of these, 70 per cent (14) did not provide a reconciliation by segment (the 11 that provided non-IFRS indicators and 3 others). In the NEXT 20 group, 10 of the 18 companies presented a non-GAAP measure of performance. These 10 companies did not provide reconciliations at segment level.

Comparison of performance indicators used with results presentations

In their results presentations, the majority (67 per cent) of companies used their own performance indicators (23 CAC; 13 NEXT). The companies showed more freedom in the presentations. Many were based on restated recurring results; eg CGG Veritas told the reader that the annual results excluded any exceptional items.

Some of the companies that used their own performance indicator in the financial statements, whether with an IFRS indicator or not, used a different, non-GAAP performance indicator in their results presentations (7 (20 per cent) of the CAC; 4 (22 per cent) of the NEXT). More than 15 different non-GAAP performance indicators were used. (Listed by company in the report.)

Restatements and adjustments to non-IFRS operating profit

The principal types of adjustments were for restructuring costs, amortisation of capitalised R&D, R&D charges, exceptional items, discontinued businesses and non-recurring items. The three most common types of adjustment were: restructuring costs; R&D charges; and restatement of depreciation/amortisation of assets revalued in business combinations (cancellation of revaluation adjustments made on acquisition).

Assets

Of the CAC group, 88 per cent of the sample presented assets by segment; only 4 companies did not provide it. Of the 31 who did, 27 agreed directly with the balance

sheet. For the other 4 it was not possible to reconcile the segment information with the group balance sheet. Four companies of the 31 showing assets also presented capital employed.

Of the NEXT group, 44 per cent (8) of companies presented disaggregated assets. All of those 8 gave a reconciliation that agreed almost directly with the group balance sheet. Of the 8, 3 presented capital employed.

Investments

In the CAC group, 30 of the 35 companies disaggregated investments. In the NEXT group, 11 of the 18 companies presented disaggregated investments.

Depreciation and provisions

In CAC group, 30 of the 35 companies presented disaggregation of depreciation and provisions. In the NEXT group, 11 of the 18 companies published this disaggregation.

Non-allocated amounts

Some of the companies did not allocate a part of their income or expenses and presented that information in a separate segment (eg holding company; corporate, non-allocated).

Those companies for which non-allocated income or expense was significant (10 per cent of the result) are listed in the report for both CAC 40 and NEXT 20 groups.

The unallocated portion as a percentage of the results of those 6 CAC 40 companies was between 13 per cent and 29 per cent, arising from unallocated costs of between 0.8 per cent and 3 per cent. The four NEXT companies had unallocated segments with percentages of results between 10 per cent and 35 per cent on unallocated costs of between 1.4 per cent and 8 per cent and unallocated revenues of 0.4 per cent to 3 per cent.

Backhuis and Camfferman (MAB 01-02)

Segmental disclosure in accordance with IFRS 8

Summary (translation)

From 2009 IFRS 8 is the standard for segmental disclosure. This article discusses the main characteristics of the standard and looks at a number of financial statements for the financial year 2009. A finding is that the new standard for segmental disclosure is being followed reasonably closely even though there is some room for improvement. One aspect of IFRS 8 is that segments are disclosed on the basis of the internal reporting system. As a consequence, there is great diversity in the disclosures across companies. Furthermore, it requires extra care when disclosing segmental information and consolidated information in a manner that is meant to be useful and insightful.

Headlines:

- 1. Introduction*
- 2. Comparison between IAS 14 and IFRS 8*
- 3. Sample description*

These are the 50 largest non-financial companies of the FTSE Eurotop 100 that are under the jurisdiction of an EU country. Table 1 shows that the introduction of IFRS 8

took place over four years. 40 per cent of the companies had already started in 2007 or 2008. Five companies had not yet applied IFRS 8 in their 2009 annual report.

4.4.1. *Segments reported*

The first step is for companies to determine the top management of the enterprise. The second step is to determine the operational segments. The third step is to determine the segments to be reported on. This is a somewhat complicated process shown in Fig 1. The expected advantages of segmental reporting in accordance with IFRS 8 were:

- (a) segments more similar to those in internal management reporting;
- (b) more consistency between reporting segments and other parts of the annual report;
- (c) some firms will report more segments than under IAS 14; and
- (d) more segmental information in interim reports.

4.4.2. *Number of segments reported (Table 2)*

The study shows 15 out of 18 companies had no significant changes in the segments reported under IAS 14 and IFRS 8.

Of the 19 companies that reported in accordance with IFRS 8 in both 2008 and 2009, 12 companies showed the same number of segments, 3 companies showed a reduction and 4 companies showed an increase. Table 3 shows that the number of segments reported increases, decreases or stays the same.

4.4.3. *Consistency between segmental reporting and directors' report*

Only two companies showed significant differences.

4.4.4 *Additional information on the determination (identification) of the segments.*

Table 4 shows that 31 per cent of the companies do not discuss the factors that determine the identification of segments and 69 per cent do discuss these factors. However, in practice this difference is not so significant because the discussions are fairly superficial.

5. *Information on income per segment*

6. *Other segmental information*

7. *Other information on the enterprise as a whole*

8. *Conclusions*

IFRS 8 is not an easy standard both for preparers and users.

Blase, Müller and Reinke (2012)

Paradigmenwechsel in der Segmentberichterstattung?

Summary (translation)

The objective of the thesis was the analysis of the change in the segment reporting standards from IAS 14 to IFRS 8.

The research sample includes the initial segment reporting of all listed German DAX, MDAX and SDAX companies (fiscal year 2009), excluding financial service firms and companies that voluntarily adopted IFRS 8 in earlier years (sample of 101 firms).

The empirical analysis shows that:

- (a) The segmentation criteria did not materially change—4 out of 5 companies still report segment financials based on products and services; with regards to the company-wide disclosures 9 out of 10 firms apply a regional segmentation.
- (b) The number of operating segments reported only slightly increased (average IAS 14: 3.2 vs. IFRS 8: 3.5 segments on the primary segmentation level; average IAS 14: 3.4 vs. IFRS 8: 3.7 segments for the company-wide disclosures).
- (c) The disclosure of segmental P&L/balance sheet items worsened as the disclosure levels of assets, liabilities and at-equity investments decreased up to 30 per cent; disclosure level of P&L items remains unchanged.
- (d) Differences between the operating segments and the consolidated figures mainly result from consolidation effects and fair value-adjustments; systematic adjustments of IFRS accounting standards could not be observed.
- (e) However, the quality of the reconciliations turned out to be relatively poor—only half of all companies fully comply with IFRS 8 and hence provides sufficient transparency.

KPMG (2010)

KPMG (2010) reports on IFRS 8 implementation by 81 companies (drawn from the 2009 Fortune Global 500). Companies were not selected randomly but instead to provide a cross-section of countries (17 countries, comprising European countries and Israel and Hong Kong) and industries (10). All companies had applied IFRS 8 and the sample included 29 early appliers.

The major findings of the study (pp. 5-6) were as follows:

- (1) The average number of reportable segments was 4.6 under IAS 14 and 5.2 under IFRS 8, possibly reflecting the high hurdle in IFRS 8 that must be met before aggregation is permitted.
- (2) Few companies disclosed how segments had been aggregated.
- (3) One third of companies provided the identity of the CODM. Within this group 75 per cent indicated that the CODM was a group of executive directors or a similar governing body.
- (4) Most companies (66 per cent) provided disaggregation by products and services. Only 11 per cent of companies presented solely geographical segments. Geographical disaggregation was predominant in specific sectors (eg food, drink, consumer goods; communication and media). Some companies (25 per cent) presented segments on a mixed basis (products and services; and geographical segments).
- (5) Most disclosed segment measures were based on IFRS (95 per cent of companies), possibly because IFRS are now embedded in management reporting.

- (6) More than half of the companies disclose segment profit excluding items (eg interest, depreciation, amortisation or other one-time items). There was a high level of consistency regarding the profit and loss measure used by companies in the same sector (eg 80 per cent of companies in the communication and media sector used EBITDA or adjusted EBITDA; 80 per cent of Insurance sector companies used operating profit or adjusted operating profit).
- (7) The reconciliations required by IFRS 8 were generally not presented like the examples in the IFRS 8 Illustrative Guidance. Most companies presented columnar tables with an elimination/consolidation column immediately to the left of the final total column (comprising the IFRS amounts).

Deloitte (2012)

A study of segment disclosure in the last year of IAS 14 and under IFRS 8 in 2011-2012 for a sample of 100 listed companies drawn from small, medium and large size categories within a group of the largest 1,000 listed companies.

IAS 14 and IFRS 8	About 69 per cent of companies presented segment disclosure with the same type of segmentation as their primary basis of segmentation under IAS 14. Many companies (43 per cent) had the same number of reportable segments. The average number of segments was three (unchanged from IAS 14) and the number of single-segment companies fell from 18 to 11.
CODM	The identity of the CODM was disclosed by 78 per cent of companies. The CODM was identified as the board by 37 per cent of companies and 11 per cent nominated the chief executive as the CODM.
Aggregation of operating segments	Only 11 companies indicated they had aggregated operating segments to form reportable segments. There may be confusion over the distinction between operating and reportable segments.
Number of reportable segments	The number of reportable segments ranged from one to nine. The average was three for companies in the small and medium groups and four for companies in the large group. Twelve companies identified their head office as a reportable segment, contrary to the requirements of IFRS 8. Eleven companies reported a single segment. However, two of these companies included information about multiple segments in their narrative report.
Basis for segmentation	Half of the companies (51 per cent) presented segment information based on type of business and 24 per cent gave geographical information. Fourteen per cent of companies combined information about type of business and geographic location.
Disclosure of segment result	73 companies provided a profit measure consistent with IFRS before items such as finance costs, exceptional items and head

	office costs. This item was often located in the income statement. Three companies reported measures not based on IFRS but they provided a reconciliation to an IFRS profit before tax figure. Eight companies reported profit before tax for each segment and five reported profit after tax.
Segment assets	64 per cent of companies reported segment assets.
Geographical entity-wide disclosures	68 per cent of companies provided external revenue and non-current assets by geographical location. 26 per cent of companies provided external revenue only.
Narrative reporting and IFRS disclosure	About 85 per cent of companies provided an analysis in their narrative reporting that was consistent with their IFRS 8 disclosures. Only one company with inconsistent disclosure provided an explanation for the mismatch.

COMPANY REPORTING (2012)

Company Reporting (2012) presents comments on segment reporting under IFRS 8 for 24 companies with financial years ending in the period June-December 2010. Companies were listed in S&P 350 index and were from a number of number of countries (12 from the UK; 4 from Germany; 3 from Switzerland; 5 other) and a range of industries.

Key findings:

- (1) *Nature of segments*: business (13 companies); geographical (5 companies); mixed (3 companies); single segment (3 companies).
- (2) *Number of segments*: 2-4 (9 companies); 5-7 (9 companies); 8-10 (3 companies).
- (3) *Measure of segment profit*: operating profit (9 companies); adjusted operating profit (2 companies); other adjusted (6 companies); profit before tax (2 companies); profit after tax (2 companies).
- (4) *Items excluded from segment profit*: taxation (19 companies); financial income and expense (17 companies); share of associates/equity accounting (6 companies); restructuring (3 companies); other (10 companies).
- (5) *Chief operating decision maker*: nine companies identify the CODM as Board of Directors (2 companies); chief executive's committee (1 company); executive committee (3 companies); and management/managing board (2 companies). The CODM is not mentioned by 13 companies.